Supplemental Specification 2005 Standard Specification Book

SECTION 02982

BRIDGE CONCRETE GRINDING

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Procedure for grinding new concrete bridge decks and approach slabs for precast concrete deck panel system or as shown on the plans.

1.2 RELATED SECTIONS

A. Section 01452: Profilograph and Pavement Smoothness

PART 2 PRODUCTS

2.1 EQUIPMENT

- A. Provide and operate equipment utilizing diamond blades mounted on a self-propelled machine designed for grinding and texturing pavement.
- B. Do not use equipment that causes damage to the transverse or longitudinal joints.
- C. Use vacuuming equipment to remove residue and excess water.

PART 3 EXECUTION

3.1 GRINDING

- A. Grind concrete bridge deck until the surface of both sides of closure-pour and deck-panel joint are in the same plane and meet the smoothness required.
 - 1. Cure shear stud blockout locations for 24 hours before grinding.
 - 2. Meet the straight-edge requirements after grinding for all locations.
 - 3. Maximum depth of milling is ½ inch.

- B. Provide a uniform finished texture.
- C. Perform grinding in a longitudinal direction.
 - 1. Begin and end grinding at lines normal to the bridge centerline.
- D. Do not damage the deck.
- E. Create a surface in a parallel, corduroy-type texture consisting of grooves between $^{1}/_{16}$ and $^{1}/_{8}$ inches wide.
 - 1. The peaks of the ridges need to be approximately $\frac{1}{16}$ inch higher than the bottom of the grooves.
- F. Maintain cross slope drainage.
- G. Provide uniform transverse and longitudinal slope of the concrete deck with no depressions or misalignment of slope greater than ¹/₈ inch in 10 ft when tested with a 10-ft straightedge.
- H. All tailings from the grinding process become property and responsibility of the Contractor.

3.2 SMOOTHNESS TESTS

A. Follow Section 01452.

END OF SECTION